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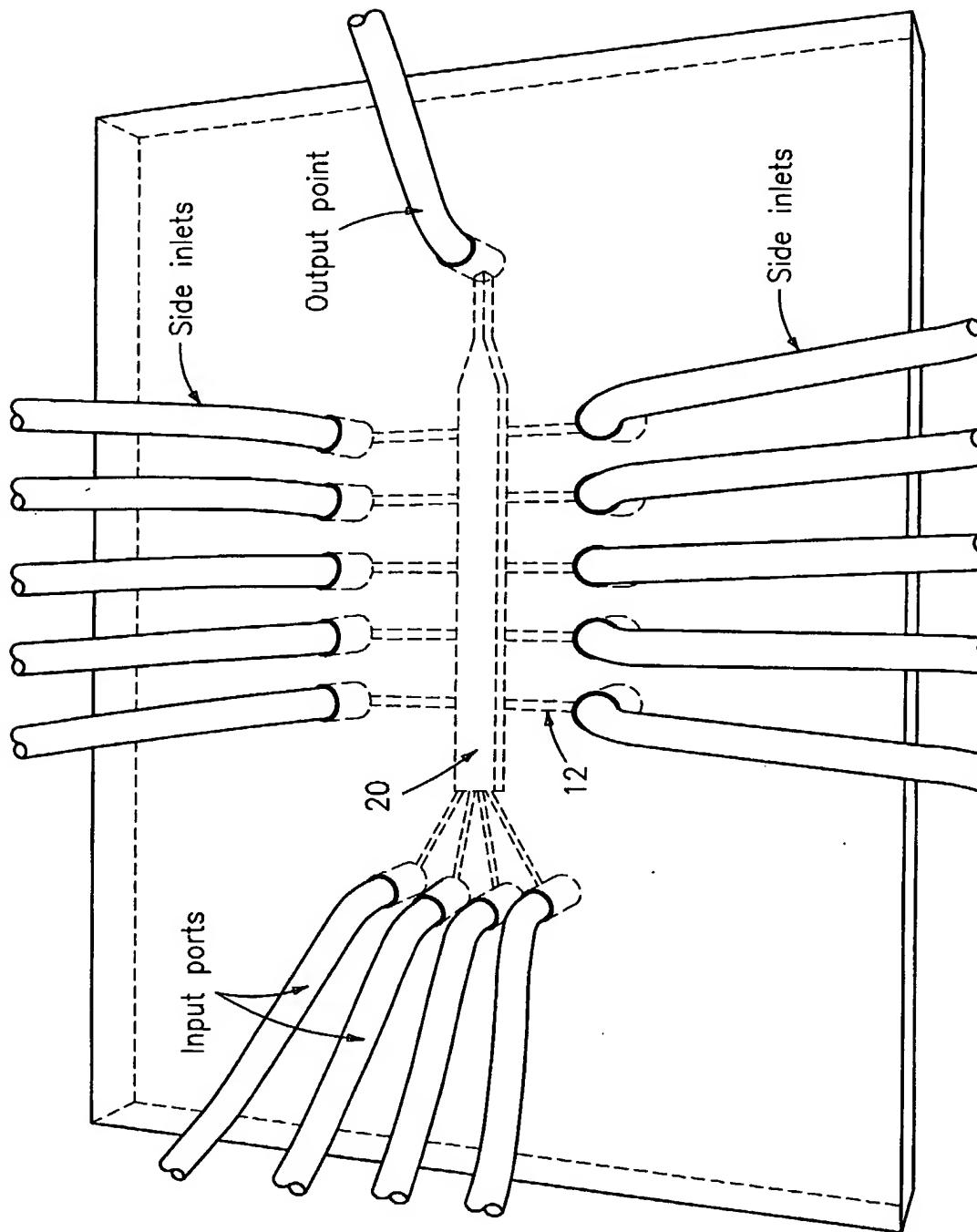


FIG. 1

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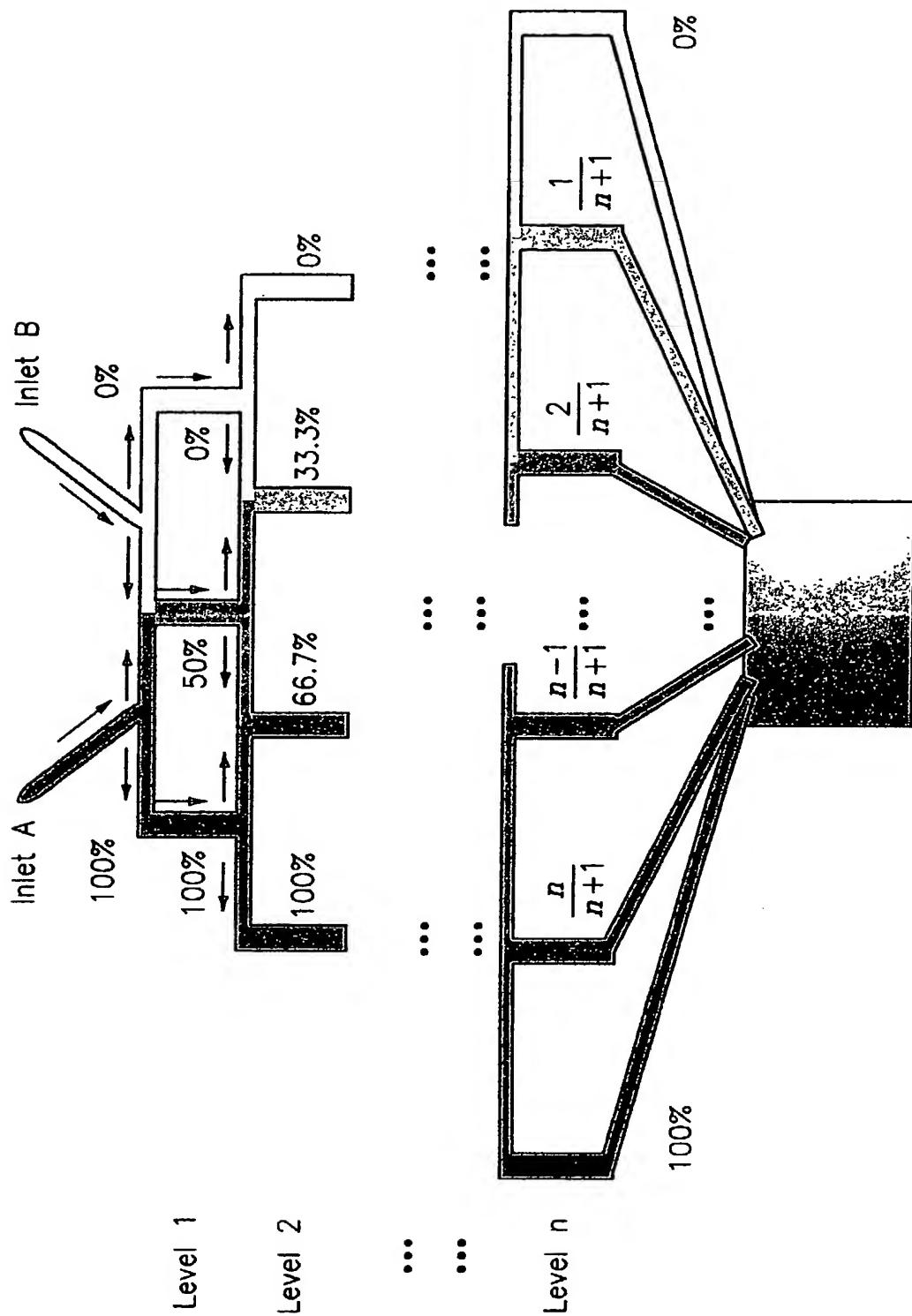


FIG. 2

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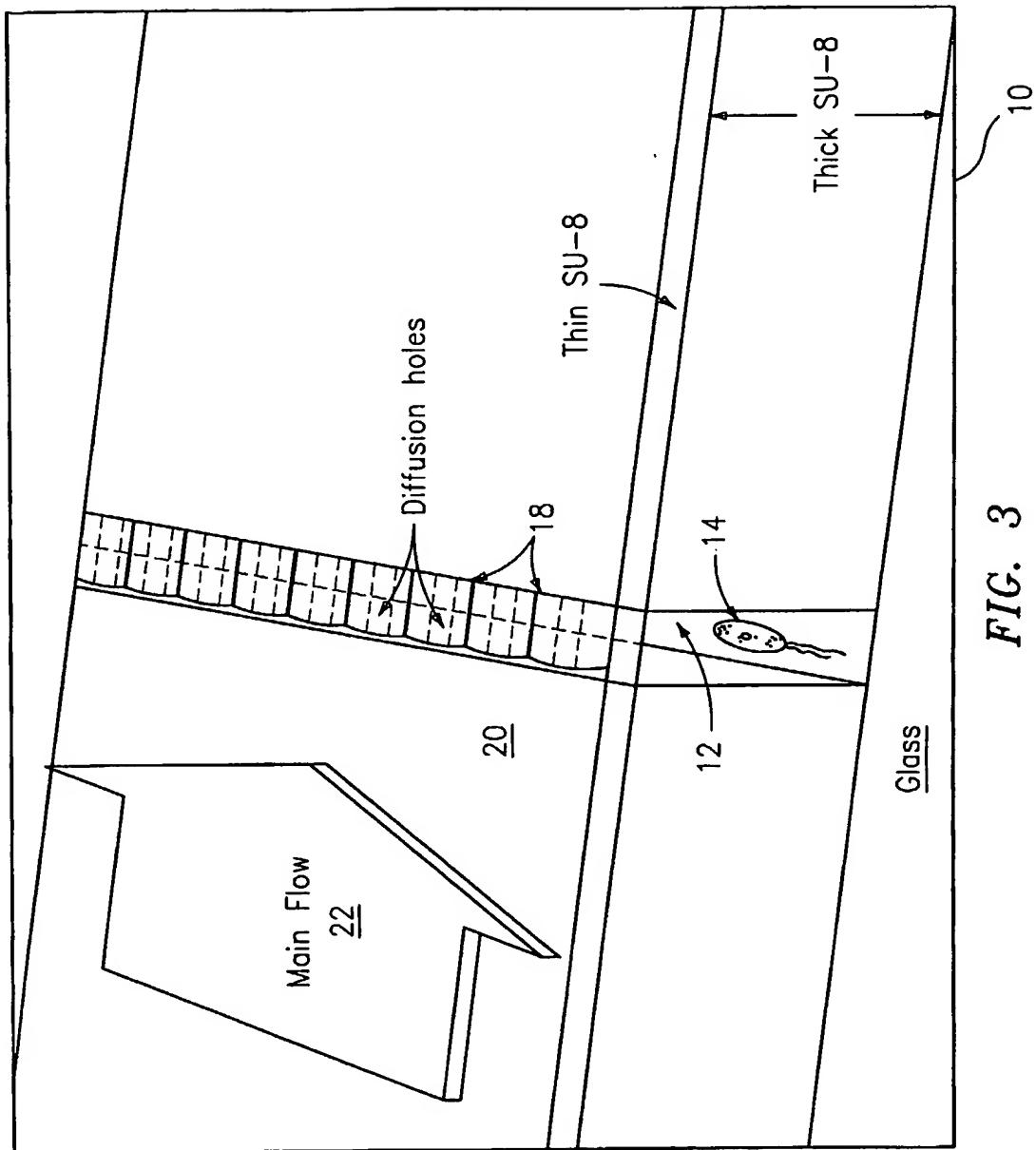
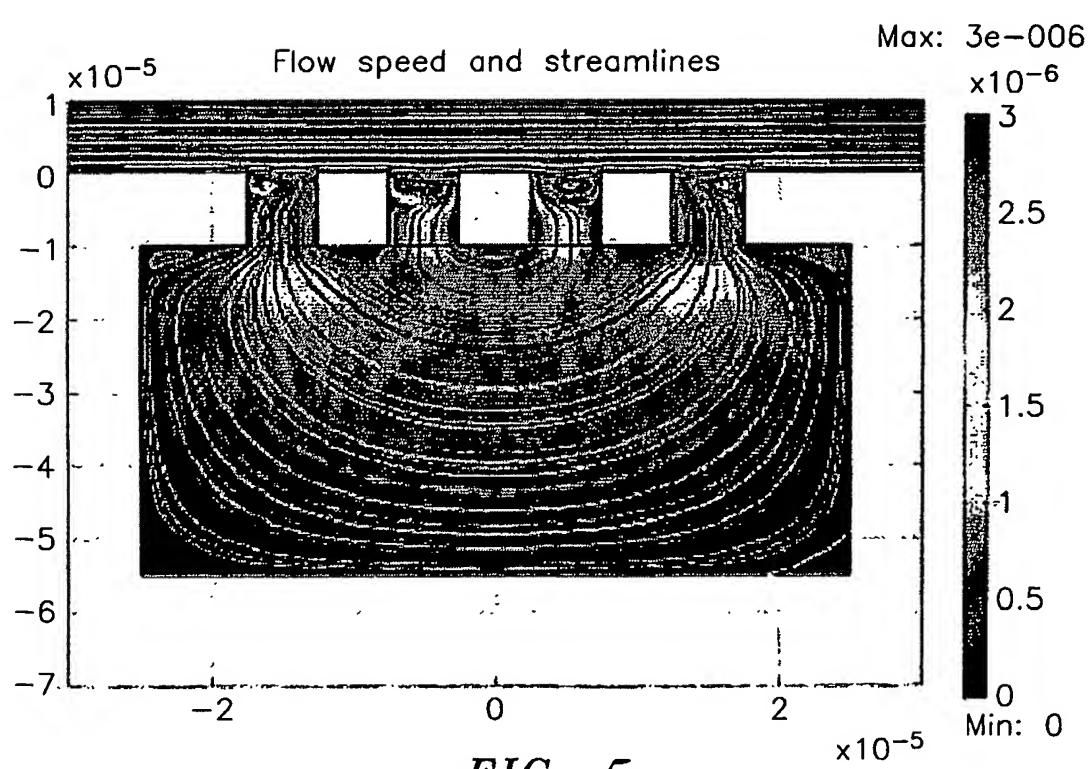
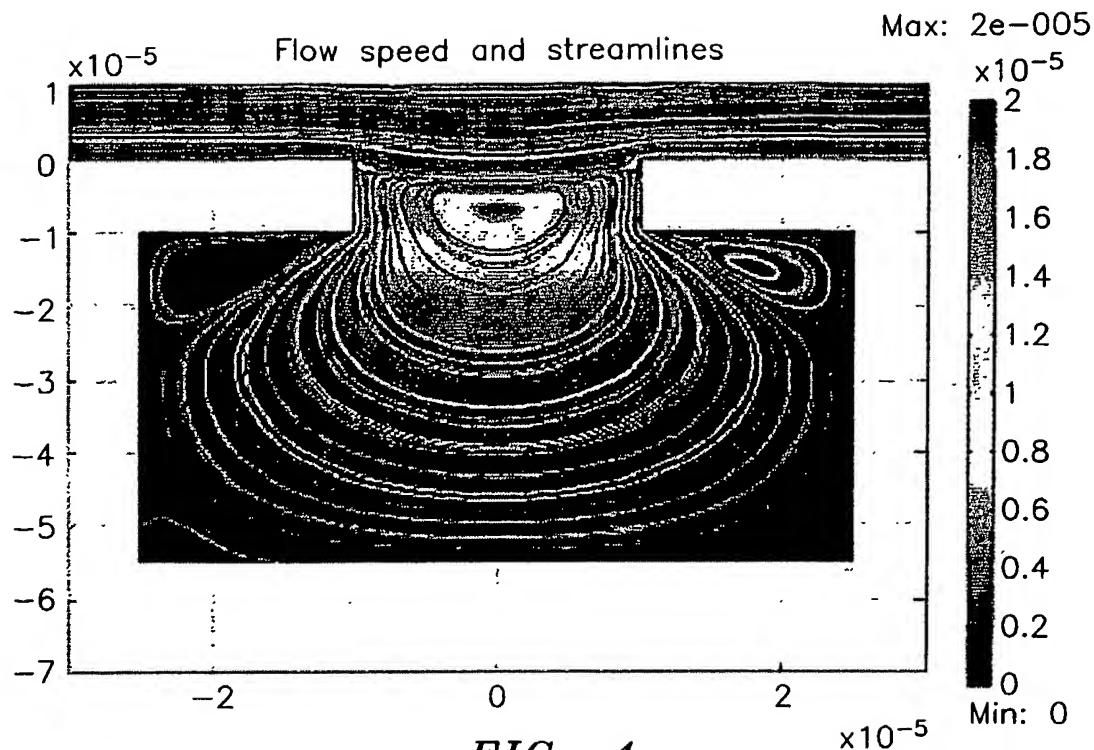


FIG. 3

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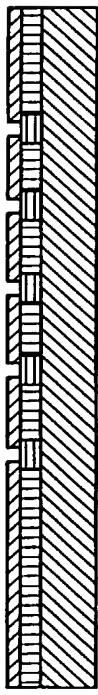
## Fabrication of trench geometry



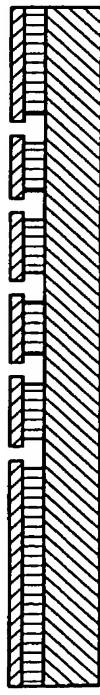
- 1) Start with a clean glass slide.



- 2) Spin thick photoresist and expose the confinement channel geometry under a mask aligner. No resist development yet.



- 3) Deposit a thin layer of silicon nitride or a resist with a very short exposure time.

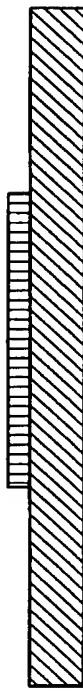


- 4) Develop the underlying to pattern the trenches.

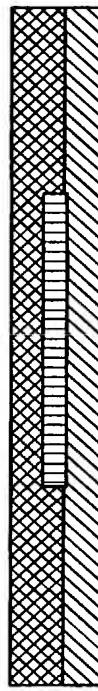
## Fabrication of the PDMS channel



- 1) Start with a clean silicon substrate.



- 2) Spin thick photoresist and pattern the main flow channel geometry. Treat surfaces with HDMS (to prevent stiction of PDMS).



- 3) Pour, cure and remove PDMS to micro-mold the main flow channel pattern.

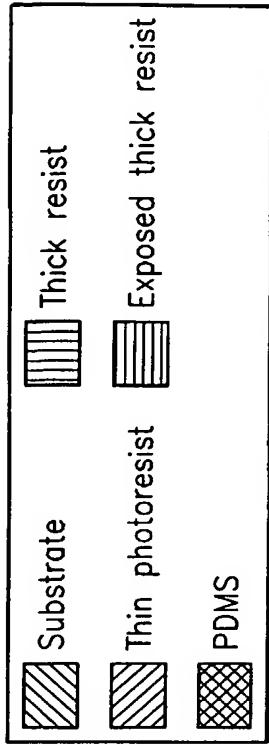


FIG. 6